

<b>Substitute for form 1449A/PTO</b>  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(use as many sheets as necessary)</i>		<b>Complete if Known</b>	
		<b>Application Number</b>	
		<b>Filing Date</b>	
		<b>First Named Inventor</b> Kia Silverbrook	
		<b>Art Unit</b>	
<b>Examiner Name</b>		<b>Attorney Docket Number</b> ZE004US	
Sheet	1	of	7

U.S. PATENT DOCUMENTS					
Examiner Initials <sup>7</sup>	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code <sup>2</sup> (if known)			
		US- 5,719,602 *	Feb 17, 1998	Hackleman et al	
		US- 6,312,114 *	Nov 6, 2001	Silverbrook	
		US- 4,706,130 *	Nov 10, 1987	Yamakawa	
		US- 4,947,192 *	Aug 7, 1990	Hawkins et al	
		US- 5,107,276 *	Apr 21, 1992	Kneezel et al	
		US- 5,160,945 *	Nov 3, 1992	Drake	
		US- 5,412,410 *	May 2, 1995	Rezanka	
		US- 5,867,183 *	Feb 2, 1999	Cornell et al	
		US- 5,218,754 *	Jun 15, 1993	Rangappan	
		US- 5,565,900 *	Oct 15, 1996	Cowger et al	
		US- 5,057,854 *	Oct 15, 1991	Pond et al	
		US- 6,007,187	Dec 28, 1999	Kashino et al	
		US- 5,896,155	Apr 20, 1999	Lebens et al	
		US- 5,812,159	Sep 22, 1998	Anagnostopoulos et al	
		US- 4,855,567	Aug 8, 1989	Mueller	
		US- 5,719,604	Feb 17, 1998	Inui et al	
		US- 5,666,141	Sep 9, 1997	Matoba et al	
		US- 4,672,398	Jun 9, 1987	Kuwabara et al	
		US- 4,737,802	Apr 12, 1988	Mielke	
		US- 5,029,805	Jul 9, 1991	Albarda et al	
		US- 5,258,774	Nov 2, 1993	Rogers	
		US- 4,553,393	Nov 19, 1985	Ruoff	
		US- 4,864,824	Sep 12, 1989	Gabriel et al	
		US- 4,423,401	Dec 27, 1983	Mueller	

FOREIGN PATENT DOCUMENTS						
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		Country Code <sup>3</sup> - Number <sup>4</sup> - Kind Code <sup>5</sup> (if known)				
		JP 40400105A *	Jan 6, 1992	Komai		
		WO 01/42020 *	Jun 14, 2001	Silverbrook		
		EP 0-842-777-B1 *	May 20, 1998	Canon Kabushiki		
		EP 0.713.774	May 29, 1996	Sharp Kabushiki Kaisha		
		DE 195 16 997	Nov 16, 1995	Sharp K.K.		
		DE 196 23 620	Dec 19, 1996	Sharp K.K.		
		JP 2-108544 (Abstract)	Apr 20, 1990	Seiko Epson Corp		
		JP 2-92643 (Abstract)	Apr 3, 1990	Seiko Epson Corp		
		JP 4-353458 (Abstract)	Dec 8, 1992	Brother Ind Ltd		
		JP 6-91865 (Abstract)	Apr 5, 1994	Seikosha Co Ltd		
		JP 6-91866 (Abstract)	Apr 5, 1994	Seikosha Co Ltd		
		JP 2-265752 (Abstract)	Oct 30, 1990	Matsushita Electronic Ind Co Ltd		

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<b>Sheet</b> 2	<b>of</b> 7	<b>Attorney Docket Number</b> ZE004US	

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		Country Code <sup>3</sup> - Number <sup>4</sup> - Kind Code <sup>5</sup> (if known)				
		EP 0 634 273	Jan 18, 1995	Sharp Kabushiki Kaisha		
		DE 195 32 913	Mar 28, 1996	Sharp K.K.		
		JP 58-112747 (Abstract)	Jul 5, 1983	Fujitsu-KK		
		DE 43 28 433	Mar 2, 1995	Heidleberger Druckmaschinen AG		
		JP 61 025849 (Abstract)	Feb 4, 1986	Canon Inc		
		JP 01 128839 (Abstract)	May 22, 1989	Ricoh Co Ltd		
		JP 04 126255 (Abstract)	Apr 27, 1992	Seiko Epson Corp		
		GB 2 262 152	June 9, 1993	Willet Int Ltd		
		DE 195-16 997	Nov 16, 1995	Sharp K.K.		
		JP 05 318724 (Abstract)	Dec 3, 1993	Seikosha Co Ltd		
		JP 02 162049 (Abstract)	Jun 21, 1990	Seiko Epson Corp		
		DE 32 45 283	Jun 7, 1984	Siemens AG		

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		Country Code <sup>3</sup> - Number <sup>4</sup> - Kind Code <sup>5</sup> (if known)				
		GB 1 428 239	Mar 17, 1976	Cibie Projecteurs		
		DE 39 34 280	Apr 26, 1990	CAE di Cipellotti Alberto		
		DE 29 05 063	Aug 14, 1980	Olympia-Werke AG		
		WO 94.18010	Aug 18, 1994	Domino Printing Sciences PLC		
		EP 0 398 031	Nov 22, 1990	Seiko Epson Corp		
		EP 0 427 291	May 15, 1991	Seiko Epson Corp		
		JP 01 115639 (Abstract)	May 8, 1989	Ricoh Co Ltd		
		JP 58 116165 (Abstract)	Jul 11, 1983	Canon K.K		
		EP 0 627 314	Dec 7, 1994	Olivetti Canon Ind SPA		
		JP 61.268453 (Abstract)	Nov 27, 1986	Olympus Optical Co Ltd		
		JP 04 118241 (Abstract)	Apr 20, 1992	Seiko Epson Corp		
		EP 0 506 232	Sep 30, 1992	Videojet Systems Int, Inc		

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		Country Code <sup>3</sup> - Number <sup>4</sup> - Kind Code <sup>5</sup> (if known)				
		JP 07 314665 (Abstract)	Dec 5, 1995	Canon Inc		
		JP 03 180350	Aug 6, 1991	Seiko Epson Corp		
		WO-97-12689	Apr-10, 1997	The Board-of-Trustees-of-the-Leland Stanford University		
		JP 02 050841 (Abstract)	Feb 20, 1990	Seiko Epson Corp		
		EP 0 510 648	Oct 28, 1992	lvri Yehuda		
		JP 05 28765 (Abstract)	Oct 29, 1993	Canon Inc		
		JP 04 141429 (Abstract)	May 14, 1992	Seiko Epson Corp		
		JP 01-105746 (Abstract)	Apr-24, 1989	Ricoh Co.,Ltd		
		GB 792,145	Mar 19, 1958	Technograph Printed Circuits Ltd		
		EP 0 750 993	Jan 2, 1997	Canon K.K		
		JP 01 306254 (Abstract)	Dec 11, 1989	Seiko Epson Corp		

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Substitute for form 1449B/PTO <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> <i>(use as many sheets as necessary)</i> Sheet <u>7</u> of <u>7</u>		<b>Complete if Known</b> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">Application Number</td> <td style="width: 50%;"></td> </tr> <tr> <td>Filing Date</td> <td></td> </tr> <tr> <td>First Named Inventor</td> <td>Kia Silverbrook</td> </tr> <tr> <td>Group Art Unit</td> <td></td> </tr> <tr> <td>Examiner Name</td> <td></td> </tr> <tr> <td>Attorney Docket Number</td> <td>ZE004US</td> </tr> </table>		Application Number		Filing Date		First Named Inventor	Kia Silverbrook	Group Art Unit		Examiner Name		Attorney Docket Number	ZE004US
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OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T <sup>2</sup>
		*NOWOROLSKI, J. MARK et al, "Process for in-plane and out-of-plane single-crystal-silicon thermal microactuators". Sensors and Actuators, A, CH, Elsevier-Sequoia S.A., Lausanne, Vol 55, no. 1, 15 July 1996, pp 65-69, XP004077979 ISSN: 0924-4247.	
		*ATAKA, MANABU et al, "Fabrication and Operation of Polyimide Bimorph Actuators for Ciliary Motion System". Journal of Microelectromechanical Systems, US, IEEE Inc. New York, Vol. 2, no. 4, 1 December 1993, pp 146-150, XP000443412, ISSN: 1057-7157.	
		*YAMAGATA, YUTAKA et al, "A Micro Mobile Mechanism Using Thermal Expansion and its Theoretical Analysis". Proceedeind of the workshop on micro electro mechanical systems (MEMS), US, New York, IEEE, Vol. Workshop 7, 25 January 1994, pp-142-147, XP000528408, ISBN: 0-7803-1834-X.	

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